

signal is phase shifted [substantially 360] greater than
180 degrees [in] with respect to the input signal.

Subt B⁹ >

3. The improved selectable phase shifter of Claim 1 characterized in that said further phase shifted input signal is derived directly from the input signal without substantial phase shift.

Subt B⁸ >

A⁴
cont

4. The improved selectable phase shifter of Claim 1 characterized by the addition of an even further phase shifted input signal and the resistance extending between and coupling to said further phase shifted input signal [to] and said even further phase shifted input signal so as to allow for an even further range of available phase shift.

Subt B¹⁰

5. The improved selectable phase shifter of Claim 4 characterized in that said even further phase shifted input signal is phase shifted 360 degrees [in] with respect to the input signal.

6. The improved selectable phase shifter of Claim 1 characterized by the addition of the resistance extending between and coupled to said even further phase shifted input signal [to] and the input signal so as to allow for an available phase shift the equivalent of 360 degrees by said phase shifter [without an additional phase shift].

7. The improved selectable phase shifter of Claim 6 wherein said resistance extends in a ring [counter] from the input signal through the phase shifted, [and] further phase shifted and even further phase shifted input signals back to the input signal.

8. The improved selectable phase shifter of Claim

9. The improved selectable phase shifter of Claim 1 characterized in that the resistance is a mechanically selectable resistance.

10. The improved selectable phase shifter of Claim 1 characterized in that the resistance is an electrically selectable resistance.

11. The improved selectable phase shifter of Claim 1 wherein the resistance is controlled by an electrical signal.

12. The improved selectable phase shifter of Claim 1 characterized in that the resistance is developed in a tapped delay line.

13. An improvement for a selectable phase shifter incorporating an input signal and a phase shifted input signal, [The improved selectable phase shifter of Claim 1] characterized in that the [phase shifted] input signal is passed through a multiplier means and said [further] phase shifted input signal is passed through a second multiplier means, said multiplier means and said second multiplier means having an [a] output, and operating to output a selectable phase shifted signal which is a combination which includes a first portion derived from said input signal and a second portion derived from said phase shifted input signal and means to control said multiplier means and said second multiplier means so as to provide for a selectable phase shifted [input] signal at said common output.

14. The improved phase shifter of Claim 13

means and second multiplier means to control [the operation of same] said portions.

15. An improvement for a selectable phase shifter incorporating an output tapped off of a resistance extending from and responsive to an input signal through a phase shifted input signal to another signal, the improvement comprising [the another signal being the input signal with] the resistance extending [360 degrees] in continuous fashion from the input signal past said phase shifted input and another signals back to the [another] input signal.

16. An improved selectable phase shifter for an input signal, said shifter comprising means to delay the input signal to provide a delayed [phase shifted] input signal, an output, variable multiplier means for the input signal for providing a [percentage of the] multiplied input signal [to] as part of said output, second variable multiplier means for said delayed [phase shifted] input signal for providing a multiplied [percentage of said] delayed [phase shifted] signal [to] as part of said output, and means to control said variable multiplier and said second variable multiplier so as to produce a selectable phase shifted signal at said output.

Add new Claims 17 - 25:

17. Apparatus for providing a phase shifted version of an electronic signal, including in combination a phase shift means responsive to said electronic signal to provide three or more relatively phase shifted signals, one of which may be equivalent to said electronic signal, a

responsive to one of said phase shifted signals, and with said adjustment element operating to allow a first portion of the signal from said output to be derived from one of said phase shifted signals, and a second portion being derived from a second phase shifted signal which portion may include zero for one of the signals, and which portions are responsive to said adjustment element.

Claim 18. Apparatus as claimed in Claim 17 wherein said resistive element is comprised of a resistor and said adjustment element is comprised of a tap on said resistor.

Claim 19. Apparatus as claimed in Claim 17 wherein said resistive element is comprised of a electronic device which is coupled to pass said first portion in response to said adjustment element.

Claim 20. Apparatus as claimed in Claim 17 wherein said resistive means is responsive to at least four relatively phase shifted signals.

Claim 21. A resistive device having a resistance means with three or more terminals configured to be responsive to electronic signals, and having an adjustment element controllable to provide an output signal at a further terminal which output signal includes a combination of two said electronic signals which are applied to a given two of said terminals, which combination includes portions which may be zero for one of said two signals, which portions are controlled by said adjustment element.

Claim 22. Apparatus as claimed in Claim 21

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